S. 476

THE NATIONAL INSTITUTE ... 11 DEC 2001

The Scottish Naturalist

Founded 1871

Volume 113 2001

Part Three

Annual Subscription £ 35.00

A Journal of Scottish Natural History

THE SCOTTISH NATURALIST

Founded 1871

A Journal of Scottish Natural History

Editorial Committee:

J.A. Gibson

John Hamilton

John C. Smyth

THE SCOTTISH NATURAL HISTORY LIBRARY
Foremount House, Kilbarchan, Renfrewshire PA10 2EZ

The *Scottish Naturalist,* now published by the Scottish Natural History Library, is an independent journal primarily devoted to the study of Scottish natural history. It was founded in 1871 by Dr. F. Buchanan White, of Perthshire, and in 1988 completed one hundred years of publication. For a summary of the record of publication, see the inside back cover.

Although the journal's main interests have always centred on the history and distribution of Scottish fauna and flora, it is prepared to publish contributions on the many aspects of Scottish natural science embraced by its title, including Zoology, Botany, Geology, History, Geography, Medicine and the allied sciences, Archaeology, and the Environment.

All papers and notes for publication, or books for review, should be sent to the Editors at the Scottish Natural History Library, Foremount House, Kilbarchan, Renfrewshire PA10 2EZ.

Contributions should be clearly written; whenever possible they should be typed, double-spaced, on one side of the paper, with adequate margins, and should try to conform to the general style and arrangement of papers and notes in the current number of the journal. Maps, diagrams and graphs should be drawn in black ink on white unlined paper. Photographs should be on glossy paper. Proofs of all contributions will be sent to authors and should be returned without delay.

Authors of papers, but not of short notes, will receive thirty reprints in covers free of charge. Additional reprints may be ordered, at cost, when the proofs are returned.

The *Scottish Naturalist* is usually published three times a year. The standard annual subscription is £35.00, which should be sent to the Editors at the Library address. Members of recognised natural history organisations, however, can receive the *Scottish Naturalist* at a greatly reduced subscription; for details apply to the Editors.

THE NATURAL HISTORY MUSEUM
31 DEC 2002
GENERAL LIBRARY

THE SCOTTISH NATURALIST

Founded 1871

A Journal of Scottish Natural History

With which is incorporated *The Annals of Scottish Natural History* and *The Western Naturalist*

113th Year 2001

CONTENTS

2001 - Part 3

Editorial

Glasgow Natural History Society - 150 years 103-105

Notes on the Bumble-Bees of Renfrewshire
By Dr. J.A. Gibson and Mr. H.A. Hillan 107-112

Mammals and Reptiles in Place-Names in the Western Isles
By Mr. Stewart Angus 113-124

Robert Dykes and the Hunterian Kenyte Sample
By Mr. Julian Jocelyn 125

Antarctica Re-discovered - Borchgrevink Rock Specimens in the Hunterian Museum
By Dr. John W. Faithfull and Dr. Graham P. Durant 127-139

Notes on the Dragonflies of Renfrewshire
By Dr. J.A. Gibson and Mr. H.A. Hillan 141-145

Short Notes 147-149

Book Review 151-152

Title-Page and List of Contents 153-155

Published by The Scottish Natural History Library

EDITORS

J.A. Gibson
John Hamilton
John C. Smyth

All items for publication should be sent to the Editors at
The Scottish Natural History Library
Foremount House, Kilbarchan, Renfrewshire PA10 2EZ

ISSN 0268-3385

The *Scottish Naturalist* is the national journal of Scottish natural history. It was founded in 1871 by Dr. F. Buchanan White, of Perthshire, and in 1988 completed one hundred years of publication. The journal exists to provide a medium for the publication of original work on all aspects of Scottish natural science. All contributions, however, represent the personal opinions of the authors concerned, and do not necessarily reflect the views of the Editors of the *Scottish Naturalist.*

Published by

THE SCOTTISH NATURAL HISTORY LIBRARY

EDITORIAL

Glasgow Natural History Society - 150 years

The most significant historical event in Scottish natural history during 2001 has undoubtedly been the celebration of the 150th anniversary of Glasgow Natural History Society, one of the most enterprising and distinguished of all local Scottish natural history societies.

The Society, originally called the Natural History Society of Glasgow, was founded on 2nd July 1851, and is only the fifth Scottish natural history society to have attained 150 years of continuous active existence, the others being Berwickshire (1831), Moray (1836), Orkney (1837), and Renfrewshire (1847), apart from the very first natural history organisation to be established anywhere in the world, the Royal Physical Society of Edinburgh in 1771.

Only four years ago we were sending congratulations to Renfrewshire Natural History Society on its 150th anniversary, and the West of Scotland is extremely fortunate to have two such eminent and distinguished societies still in active existence and with so many fine past achievements. Several other Scottish natural history societies have attained centenaries, but, as far as we are aware, the next Scottish societies on the 150th anniversary list are Dumfries and Galloway (founded 1862), Perthshire (founded 1867), and Edinburgh (founded 1869). We wish them all well.

The Glasgow Society commenced serious publication in October 1868, which was actually over two years prior to the establishment of the national journal itself, the *Scottish Naturalist*. The Society's exemplary series of *Proceedings* and *Transactions* continued intermittently every few years until 1909, when the name was changed to the *Glasgow Naturalist*, under which title the Society's journal has been published ever since, and has long been one of the most highly regarded of all local natural history society publications.

As part of its 150th anniversary celebrations the Glasgow Society hosted an enterprising two-day conference on 'Alien Species' on 15/16th June 2001 at Glasgow University, followed by a celebratory dinner, and it has been announced

that the proceedings of the conference will be published in a forthcoming part of the *Glasgow Naturalist*.

In addition, the *Glasgow Naturalist* for 2001 (Volume 23, Part 6) contained a specially commissioned sixty-page Historical Supplement from invited contributors. This important Historical Supplement contains a great deal of interesting and valuable historical information about the development of natural history, particularly in the West of Scotland, and its contents are listed below:

Downie, J.R. 150 years of Glasgow Natural History Society.

Sutcliffe, R. Glasgow's Natural History Societies - an Update.

Downie, J.R. and Tait, T.N. Evolution of the *Glasgow Naturalist* from the 'Missing Proceedings' to Modern Times.

Gibson, J.A. Proceedings of the Natural History Society of Glasgow: the Missing Years, 1851 to 1859.

Tait, T.N. Photography in the Glasgow Natural History Society.

Weddle, R.B. The 'Clyde Cards': an Account of Biological Recording in the West of Scotland.

Gibson, J.A. The *Faunal of Scotland* series.

Dickson, J.H. Nearly Fifty Years Ago: Meeting Blodwen Lloyd, John Lee and other Prominent Botanists in the Society in 1954-55.

Dobson, R.M. Prominent Glasgow Natural History Society Zoologists.

Stewart, E. Ben Lomond - 1900 and 2000: Botanical Recording by Glasgow Naturalists, Past and Present.

Curtis, E.W. Glasgow Botanic Gardens: Links with Glasgow Natural History Society.

Mitchell, J. The Glasgow Natural History Society and its Involvement in Post-War Regional Planning.

This historical part of the *Glasgow Naturalist* was distributed free to all members of the Society, but non-members who are interested can obtain a copy (price £3.50; plus £1.50 p. & p. UK, £3.00 overseas) on application to the Society's Librarian, c/o Natural History Department, Museum and Art Gallery,

Kelvingrove, Glasgow G3 8AG. Copies are now in fairly short supply, so anyone who wants to obtain a copy should apply without delay.

We have the greatest pleasure in sending our heartiest congratulations to the Glasgow Natural History Society, plus the good wishes of all Scottish naturalists for the Society's continued and well-merited future success.

NOTES ON THE BUMBLE-BEES OF RENFREWSHIRE

By J.A. GIBSON and H.A. HILLAN
Renfrewshire Natural History Society

Introduction

For many years we have taken a considerable interest in the bumble-bees (Genus *Bombus*) and the closely-allied cuckoo-bees (Genus *Psithyrus*) of Renfrewshire. Although some species of bees have previously been briefly mentioned, it is possibly surprising that no attempt to compile a complete list of the bumble-bees or cuckoo-bees of Renfrewshire has appeared in the past 150 years of the Renfrewshire Natural History Society's *Transactions* or other publications, so it is hoped that the following notes on distribution, based on some fifty years of collected observations, will be of interest to other observers.

Identification Method

Identification is fairly straightforward for the larger or more common species of bees, but for the more unusual or smaller species the identification method we have used most often is to catch and imprison the bee for a short time in a clear plastic cup with a lid. This makes close and detailed examination easily possible, and identification, when immediately compared to a suitable key, usually reliable. It also avoids any real harm to the bee or danger to the observer. It makes good sense to take care when examining bees, since the sting of some species can be surprisingly severe, particularly if one has been previously stung and possibly sensitized.

For many years now we have been in the habit of carrying this small plastic cup whenever we are out on fieldwork of any kind, and without this useful aid to identification it is likely that many records of the smaller or less common bees could well have been missed.

Identification Keys

The identification book we originally used was Edward Step's *Bees, Wasps, Ants and Allied Insects of the British Isles* (1932), but within recent years we have also used Dr. D.V. Alford's *Bumblebees* (1975), which has more detailed identification keys and illustrations, and also has the advantage of up-to-date classification and nomenclature. These two works have permitted ready identification of nearly all the bees we have found.

Information on Distribution

The following notes on the distribution of bumble-bees throughout Renfrewshire are entirely personal, but at least a start has been made, and to our own notes, and those in the Renfrewshire Society's records, we have added any additional records for Renfrewshire given in the national distribution Atlas, the *Atlas of the Bumblebees of the British Isles* (Alford, 1980), although not necessarily with any precise knowledge as to the origin of the records; these instances are made clear in the text.

Although the authors have been interested in bees and their distribution for a great many years, they would not consider themselves to be specialists on bees, so it is possible that other workers may be able to add to the information given in this list, particularly with regard to the less common species. If any other naturalists know of any additional published or unpublished records, the authors will therefore be most grateful to have these drawn to their attention.

English Names

With regard to the English names of bees, it has long been the established practice not to use these in scientific work (Alford, 1975 and 1980), but very many years ago, as young naturalists just becoming interested in bees, we became accustomed to these old names from Edward Step's book and from the senior naturalists of our early days, so have continued to use them ever since in day-to-day description. Even although these English names may seem to be somewhat contrived, they have now been in use for generations and may well be useful to the average naturalist, so the English names are also included in the Systematic List.

The original English name for the Genus *Bombus* was Humble-Bee. This was certainly the version commonly used up till the time of Step (1932), but by the mid-1940s the name in widespread general use had changed to Bumble-Bee.

Systematic List

Most naturalists will be aware that there are two distinct types of bumble-bees, the working species (Genus *Bombus*), i.e. the true bumble-bees, and the non-working species (Genus *Psithyrus*), the so-called cuckoo-bees because of their inquiline habits. The cuckoo-bees depend for their existence on the true bumble-bees, in whose nests they are reared.

In the following Systematic List of species the arrangement and nomenclature follow Alford (1975). We do not deal with any of the sub-species which have been described.

Genus *Bombus*

BROKEN-BELTED BUMBLE-BEE *Bombus soroeensis*

Distinctly uncommon, with only four confirmed records (plus other 'possibles'), all from east Renfrewshire until the early 1970s; none since. Alford (1980) lists pre-1960 for square NS66, on the eastern boundary of Renfrewshire.

SMALL EARTH BUMBLE-BEE *Bombus lucorum*

Common and widely distributed, particularly so in gardens. One of the commonest bees in Renfrewshire. Appears early, often from March onwards.

LARGE EARTH BUMBLE-BEE *Bombus magnus*

At one time regarded as a large variety of *lucorum*, but now considered to be a separate species (Alford, 1975). We formerly assigned all records of this species to *lucorum*, but recently have several records of true *magnus*. Alford (1980) also records this species from square NS27, and it is likely that further work will produce additional records.

BUFF-TAILED BUMBLE-BEE *Bombus terrestris*

Not uncommon, and fairly widely distributed on lower ground, particularly in gardens.

HEATH BUMBLE-BEE *Bombus jonellus*

Not uncommon, but local, being more or less confined to higher ground, moorland, etc, as the English name suggests.

BILBERRY BUMBLE-BEE *Bombus lapponicus*

A very local species, being confined mainly to moorland sites where bilberry proliferates, in keeping with its English name. Alford (1980) records this species from the moorland area of square NS37, from where our own few Renfrewshire records come.

EARLY BUMBLE-BEE *Bombus pratorum*

Well known and generally distributed; sometimes nearly as common as *hortorum*.

LARGE RED-TAILED BUMBLE-BEE *Bombus lapidarius*

Although Alford (1975) considers this to be "a common species over much of the country", in our experience this is distinctly rare in Renfrewshire, and our very few records come from gardens, where *lapidarius* seems to favour the same flower species as do honey-bees, as Alford also indicates. Alford (1980) gives pre-1960 for square NS66.

SMALL GARDEN BUMBLE-BEE *Bombus hortorum*

Abundant and widely distributed in all suitable areas. Far and away the commonest species of bee in Renfrewshire.

BROWN-BANDED CARDER-BEE *Bombus venustus*

[There is an old doubtful record from Paisley listed in the well-known *British Association Handbook* of 1901, where it is stated that this species had been recorded from "several localities" in the Clyde area "but no specimens are in existence so far as has been ascertained". It is likely that there was confusion with *B. muscorum*, the following species, as was suggested at the time. Alford (1975) said that *B. venustus* (now called *B. humilis*) is "apparently absent from both Ireland and Scotland".]

MOSS CARDER-BEE *Bombus muscorum*

Not really common, but a few records over the years, all from low-lying coastal areas in the west of the county. Alford (1980), however, gives pre-1960 for square NS47.

COMMON CARDER-BEE *Bombus pascuorum*

Fairly well known, and widely distributed. More commonly seen during warm weather, and not often found in exposed situations.

GREAT YELLOW BUMBLE-BEE *Bombus distinguendus*

Alford (1980) lists pre-1960 for NS57, the 10km square at the north-east corner of Renfrewshire. We have no personal record.

Genus *Psithyrus*

GIPSY CUCKOO-BEE *Psithyrus bohemicus*

Fairly common and widely distributed. An inquiline of *B. lucorum*, whose distribution it follows.

BARBUT'S CUCKOO-BEE *Psithyrus barbutellus*

Fairly common and widely distributed. An inquiline of *B. hortorum*, whose distribution it follows.

FIELD CUCKOO-BEE *Psithyrus campestris*

An inquiline of *B. pascuorum,* which does occur fairly widely in Renfrewshire, so one would also expect *campestris* to occur, but we have no personal records, although Alford (1980) does give pre-1960 for square NS15, which is just outwith the Renfrewshire boundary. Any additional information would be very welcome.

FOUR-COLOURED CUCKOO-BEE *Psithyrus sylvestris*

An inquiline of *B. pratorum*, but although *pratorum* is a common species in Renfrewshire, oddly enough we have no personal records of *sylvestris*. Alford (1980), however, does give pre-1960 for square NS57, the 10km square just outwith the north-east boundary of Renfrewshire.

Summary

Of some twenty-five species of bumble-bees recorded for the British Isles, at least thirteen species have been recorded for Renfrewshire, with possibly three more on Renfrewshire's immediate borders. By far the commonest bees are *hortorum* and *lucorum,* followed by their inquilines *bohemicus* and *barbutellus,* which together comprise the vast majority of the Renfrewshire bee population. In our experience, which must be limited, the other species are all comparatively uncommon or rare, but this, of course, may simply be because they are difficult to identify or are inconspicuous, and indeed we believe we would never have noticed some species at all had it not been for the routine habit of trapping and examining any bee which seemed unusual.

It is therefore hoped that the publication of the above short species list may stimulate others to add to the known information about the distribution of bees in Renfrewshire.

References

Alford, D.V. (1975). *Bumblebees.* London: Davis-Poynter.

Alford, D.V. (Ed.) (1980). *Atlas of the Bumblebees of the British Isles.* London: International Bee Research Association; and Huntingdon: Biological Records Centre, Institute of Terrestrial Ecology.

Step, E. (1932). *Bees, Wasps, Ants and Allied Insects of the British Isles.* London: Warne.

Dr. J.A. Gibson,
Foremount House, KILBARCHAN, Renfrewshire PA10 2EZ.

Mr. Hugh A. Hillan,
9 Belleisle Crescent, BRIDGE OF WEIR, Renfrewshire PA11 3JA.

MAMMALS AND REPTILES IN PLACE-NAMES IN THE WESTERN ISLES

By STEWART ANGUS
Conon Bridge, Ross-shire

With access to an electronic list of all place-names on 1:10,000 Ordnance Survey maps and Admiralty charts (Angus, in prep.) it is now possible to conduct rapid searches for any feature, even allowing for the many linguistic variations (including aspirated forms). This paper lists the names which appear to feature mammals and reptiles in the Outer Hebrides, with comments where appropriate.

In general, the four-figure grid references occur on the 1:25,000 sheets, while six-figure references will be found only on the 1:10,000 sheets.

Gaelic names are taken from Thomson (1981), Dwelly (1977), Forbes (1905), Macalpine and Mackenzie (1975), Harvie-Brown and Buckley (1888), and Garvie (1999). The lists given by Forbes are sometimes extensive, and some selectivity has been applied here. Garvie, who compiled her lists from previously published sources, suggested that a variety of names for one species gives rise to confusion, which can be true, but the quest for standardisation should not overlook the need to conserve the full range that is so useful in studies such as this.

Anyone venturing opinions on the derivation of place-names invites criticism, and this is particularly true when these opinions belong to someone who is not a fluent speaker of the language. If, however, feedback results in a more reliable and informative list, so much the better. I have also erred on the side of inclusion rather than exclusion where doubts exist.

It should also be stressed that that not all potential pitfalls are linguistic: some names featuring *eala* (swan) in the Sound of Harris in fact refer to an old *birlinn* (sailing vessel) of that name (Mackillop, 1989), and similar indirectly derived place-names may occur for mammals.

Domesticated animals have been omitted, except where there are relationships with wild animals.

Hedgehog: *gràineag* (f), *draineag, graineag, gruin, griun*: no names recorded. This is hardly surprising, as the species was unknown in the Western Isles until it was introduced in the 1970s.

Shrew: *dallag-an-fhraoich* (f): possibly in Leac nan Dallag, West Tamana, Uig NB008194. *Leac* is a flagstone or slab of stone, sometimes one covered by the sea at high water, while *dallag* can refer to a range of animals believed to be blind, including dogfish, mole and leech (Garvie, 1999); in this context, it is much more likely that *dallag* refers to dogfish. Forbes also gives *Beothachan-feoir, feornachan, fionnag-feoir, labhallan, lamhalan* and *truth*, none of which occurs in any island place-names. Chris Lawson (pers. comm.) gives *feallagan* which also drew a blank in searches. See also mice.

Bat: *ialt, ialtag, craitneag, callach, cullach, dealtag, diallag, dialtag, graitneag, mioltag, feasgar-luch*: no place-names recorded.

Rabbit: *coineanach* (m), *rabaid* (f). Geodha nan Coinneanach, Chicken Head, Point NB501291 probably does not refer to rabbits, as Dwelly gives 'ruttish' for *coinneanach*. Rabaid does not occur. The only rabbit place-name known for the Western Isles was "lyis Sigrame moir na guneyne" used by Dean Monro (Munro, 1961) of an island now known simply as Shiaram Mor, off Tràigh na Bèrie in Uig, Lewis, the first known location for rabbits in the Western Isles. The lack of other rabbit names is probably due to their comparatively recent introduction elsewhere.

Hare: *maigheach, geàrr, fiamain, sgiarnag*. Loch na Gearr-abhainn, Lochcarnan, South Uist NF7943; Eilean nan Gearr, Liernish, North Uist NF8858; Loch na Gearrabhainn, Carnan-ard-Wiay, Benbecula NF8448; Loch Fada na Gearrachun, Geirisclett, North Uist NF7674; Loch a'Sheangearraidh, Tobson, Great Bernera NB145392; Loch na Gearrachun, Malaclete, North Uist NF765743; Gearr-clachan, Loch nan Struban, North Uist NF806646; Clach Fhionnlaidh Ghearr, Glen Langadale NB152126. The majority of these names probably refer not to hare but to grilse, while others are probably 'short'. Dwelly gives *gearr-a'-chain* for grilse, which is possibly the origin of *gearrachun* as used above. None of them can be ascribed to hare with any certainty. *Maigheach, sgiarnag* and *fiamain* do not occur. Hares are more recent introductions than rabbits.

Vole: *buaidh-iomlan* is given by Macalpine and Mackenzie, but is not listed by Dwelly, while Forbes also gives *lamh-alan* and *lamh-fhual*. Neither Harvie-Brown and Buckley nor Thomson give a Gaelic name for vole. There are no place-names

linked to any of these terms, but they may be included with *luch* names in the Uists (voles do not occur in Lewis or Harris).

Mice: *luch* (f). Harvie-Brown and Buckley were not aware of the occurrence of field mice in the Outer Hebrides, and it is unlikely that place-names distinguished between the house mouse and the field mouse.

Allt nan Luch, Loch Veiragvat, North Uist NF8872; Cleite nan Luch, Sound of Harris NF9575; Feadan nan Luch, Carloway NB2639; Airigh nan Luchag, Loch Veiragvat, North Uist NF8872. *Luch* may also include shrews and voles. Luchag is the diminutive of Luch, meaning 'little mouse', which could conceivably refer to the pygmy shrew. *Luchag* is sometimes used of all mice, not just small ones (Chris Lawson, pers. comm.).

Luchaire is a mouser, but Creag a'Luchair Bhig and Creag a'Luchair Mhoir NB3734 probably refer to 'brightness'.

Rat: *rodan*, *radan* (m). Tòb Sgeir nan Radan, Loch Seaforth NB245161; Sgeir nan Radan, Loch Seaforth NB245161; Sgeir nan Radan, Loch Eport NF845638; Eilean nan Radan, Carinish, North Uist NF8059; Eilean nan Radan, Loch Maddy NF9269. Forbes also gives *gallach* and *gall-luch*, neither of which yielded any results. The old rats of Britain were the Ship Rat *Rattus rattus*, which still exists on the Shiant Isles, and it is interesting to note that all these place-names are coastal.

Pine Marten: *taghan* (m). Though now extinct in the Western Isles, the marten (known in some old texts as 'mertrick') formerly occurred in Lewis and Harris. It was exterminated in the early years of the 20th century, and records are sparse. The place-name evidence (Figure 1) is therefore of considerable importance in plotting its former distribution. Though the name can apply to other members of the family (Garvie, 1999), in the Western Isles *taghan* is likely to refer only to the pine marten.

Geodha an Taghain, Islivig NA981274; Gil an Taghain, Uig NB187287; Carn nan Taghan, Garry NB5350; Creag an Taghain, Dalmore, Carloway NB2245; Creag an Taghain, Grimersta, Uig NB2128; Geodha an Taghain, Arnol NB3150; Gleann an Taghain, Grimersta, Uig NB1828; Leum an Taghain, Balallan NB2923.

Forbes also gives *foclan*, *fochdalan*, *fumair*, *fumaire*, *tachan* and *taoghan*, none of which were found in place-names.

Figure 1

Place-names of Pine Marten *Martes martes* in the Outer Hebrides

Dots represent all records of *taghan.*

Otter: usually known as *biast-dubh* (f) (black beast) in the Western Isles, but the other word for otter, *dòbhran* (m), is much in evidence in island place-names. Though there are many place-names featuring *biast* or *beiste* without the adjective, these are given here, in the likelihood that they too refer to otter, but in some cases the lochs involved were believed to hold 'monster-like' beasts.

Loch Dobhrain, Garyvard, Lochs NB3519; Loch Dobhrain, Howbeg, South Uist NF7634; Rubh'an Dobhrain, Mealasta Island NA9820; Sidhean Loch an Dobhrain, Kershader, S.Lochs NB3520; Stac an Dobhrain, Melbost Borve, Ness NB4057; Allt Loch an Dobhrain, Garyvard NB354202.

Carn na Beiste, Little Bernera NB136413; Eilean na Beiste Dhuibhe, Valtos, Uig NB095372; Cnoc na Beiste, Miavaig NB089340; Geodha na Beiste, Vacsay NB118369; Rubha na Beiste, Valasay, Great Bernera NB139370; Carn na Beiste, Scaliscro NB143327; Allt Loch na Beiste, Lundale NB180301; Allt Airigh na Beiste, Marybank NB370340; Geodha na Beiste Duibhe, Garrabost NB498332; Allt Loch Beag na Beiste, Uig NB187296; Loch na Beiste Dubh, Grimersta NB211261; Loch na Beiste, Lochganvich NB276263; Allt Gil na Beiste, Aird Bheag, Uig NB034194; Carn na Beiste, Aird Bheag, Uig NB033195; Gil' na Beiste, Aird Bheag, Uig NB035193; Loch Dubh na Beiste, Cromore NB394192; Loch na Beiste, Finsbay NG074864; Druim nam Biast, Shawbost NB244477; Rubha nam Biast, Valasay, Great Bernera NB143368; Airigh na Beiste, Pentland Road NB3634; Allt Airigh na Beiste, Pentland Road NB3634; Allt na Beiste, Mol a'Tuath, South Uist NF8536; Bagh na Beiste, Point NB5532; Blar na Beiste, Coll Moor NB4340; Cleit na Beiste, Lochganvich NB2726; Cleite na Beiste, Grimersta, Uig NB1829; Cnoc na Beist, Miavaig, Uig NB0834; Creag na Beiste, Lochganvich NB2726; Druim na Beiste Duibh, Valtos, Uig (A) NB0937; Eilean na Beiste Duibhe, Valtos, Uig (OA) NB0937; Gleann na Beiste, Newton, North Uist NF9075; Loch Beag na Beiste, Grimersta, Uig NB1829; Loch na Beiste, Aird Bheag, Uig NB0319; Loch na Beiste, Balranald, North Uist NF7470; Loch na Beiste, Bedersaig, North Harris NB0010; Loch na Beiste, Ben Ernakater, North Uist NF7870; Loch na Beiste, Ben Scaapar, North Uist NF9570; Loch na Beiste, Carloway NB2537; Loch na Beiste, Cheesebay, North Uist NF9572; Loch na Beiste, Cromore, South Lochs NB3920; Loch na Beiste, Grimersta, Uig NB1729; Loch na Beiste, Laxay NB3322; Loch na Beiste, Loch Caravat, North Uist NF8460; Loch na Beiste, Scadabay, South Harris NG1892; Loch na Beiste, Uiskevagh, Benbecula NF8649; Loch na Beiste, Wiay, Benbecula NF8745; Loch na Beiste Bige, Pentland Road NB3634; Loch na Beiste Duibhe, Griminish, Benbecula NF7852; Loch na Beiste Mor, Pentland Road NB3634; Rubha na Beister, Sheshader, Point NB5532; Sloc na Beiste, Berneray, Barra NL5480.

Forbes also gives *balgair, beisd-dubh* or *donn*. The only name associated with any of these is Garadh na Beisd at Ardhasaig, Harris NB1202.

Feral Cat: *cat*, *cait* (m). Cat Rock, Sound of Barra NF7508; Catach, Berneray, Sound of Harris NF9281; Catary, Askernish NF7623; Cnoc nan Cat, Ranish NB407249; Creag nan Cat, Arivruaich NB2316; Loch Creag nan Cat, Arivruaich NB233162; Sgor nan Cat, Aird, Point NB5635; Caiteshal (449m), Pairc NB2404; Geodha Caiteag, Pabay Mór NB105376; Loch Caitaig, Earshader, Uig NB1633; Carn a'Chat, Marvig NB415191; Creag a'Chait, Shawbost NB235466; Creagain a'Chait, Carloway NB219410; Gleann Creag a'Chait, Carloway NB2240; Loch a'Chait, South Harris NG1294;

MacNeil (1988) mentions a cliff called Sgor-a-Chàit, in Kentangaval, Barra, where a family of 'wildcats' had lived in a hollow at one time. This name does not appear on any of the Ordnance Survey sheets.

Mackillop (1989) gives a rock name *An Cat* off Berneray (Sound of Harris) (Catach, above?) but suggests that this refers to the sea breaking over it in storms.

Red Deer (Figure 2)**:** *fiadh* (m) deer (nom pl and gen sing *feidh*). Druim nam Fiadh, Crowlista NB049342; Loch nan Caora Fiadhag, Valasay, Great Bernera NB142370; Glaic nam Fiadh, Keose NB358218; Aonaig nan Fiadh, Aird Mhor, Uig NB019176; Meall Aonaig nam Fiadh, Aird Mhor, Uig NB019175; Bealach nam Fiadh, Aird Mhor, Uig NB025176; Ruadh nam Fiadh, Loch Langavat NB194199; Eilean Mór Ard nam Fiadh, Loch Olavat, Benbecula NF818546; Aird nam Fiadh, Gramsdale, Benbecula NF8155; Airigh nam Fiadh, Seaforth Head NB2917; Ath nam Fiadh, Loch Bee NF8041; Bagh nam Fiadh, Loch Bee, South Uist NF7841; Bid nam Fiadh, Gravir, South Lochs NB4015; Cleit nam Fiadh, Balallan NB2622; Cnoc na Fiadh, Borve, South Harris NG0394; Cnoc nam Fiadh, Barvas Moor NB3835; Creag Fiadh-bhalla, Glen Cravadale, Harris NB0211; Creag nam Fiadh NB3033; Creag nam Fiadh, Lochganvich NB2831; Eilean Cuithe nam Fiadh, Eochar, South Uist NF7847; Eilean Fiadhaich, Loch Olavat, Gramsdale, Benbecula NF8154; Feadan nam Fiadh, Arnol NB3347; Glac nam Fiadh, Loch an Strumore, North Uist NF8869; Leana nan Caora Fiadhag, Ness NB4759; Loch Glac nam Fiadh, Flodabay, South Harris NG0889; Loch nan Caora Fiadhag, Valasay, Great Bernera NB1437; Loch Glac nam Fiadh, Flodabay, South Harris NG0889; Sron nam Fiadh, Hushinish NA9912; Tom nan Fiadh, Cleascro, Achmore NB3428; Feidh Mhor Lag na h-Analach, Ness NB5361.

Figure 2

Place-names of Red Deer *Cervus elaphus*
in the Outer Hebrides

Dots represent names featuring *fiadh* (all forms), and crosses names featuring *sealg*. The scale does not allow for the inclusion of St Kilda, where there is a possible *sealg* name on Dun (see text).

Harvie-Brown and Buckley (1888) state that the island of Muldoanich, east of Vatersay, was formerly known as Eilean nam Fiadh, because MacNeil used to keep deer there.

Damh - stag (but may also mean an ox, a part of a beam, a mast, or a joist). Coilleag Mhor nan Damh, Ceann Ear, Monach Isles NF6462; Damhag, Galtachean, Shiant Islands NG3898; Geodha na Damhach NA991246. Given the situations of the first two, they are unlikely to relate to deer, and the third is dubious.

John Love (1980), wrote that deer traps on the Isle of Rum were traditionally referred to as *Tigh 'n Sealg* (hunt houses), and he pointed out to me recently that there is a feature known as 'Suidheacha-sealg' - perhaps the 'situation of the hunt' N.E. of Loch Scadavay, North Uist, at NF889673. His theory is backed up by the apparent existence of an old wall or dyke, still visible on the ground or from aerial photographs and marked on the 1:25000 map, which would block the progress by land of any deer driven off the Lees. Many writers have commented on the ability of deer to escape persecution in the Uists by swimming. Harvie-Brown and Buckley (1888) remarked that the practice of driving had been given up, and that the deer were killed only by stalking. The term also occurs in place-names at Suidheachadh Sealg in Benbecula, North of Rueval, between large lochs at NF824550; again there is an old dyke which would guide the deer towards the hunting place. Other names which may be similar in origin, but without the same topographical features are: Garbh Allt Cheann Tigh Shealg, Loch Shell NB302103; Garbh Allt Cheann Tigh Shealg, Pairc NB303097; Rubh' an Tigh-sheilg, Lochboisdale NF791199; Crois an t-Suidheachain (site of), Mingulay NL566827; Loch Geal Suidheacha-sealg, Lochmaddy NF8967.

Sealg, meaning 'hunt' and *sealgair* 'hunter', could apply to deer, seals, birds or even whales, but inland deer would be the most likely quarry. Loch Sealg in Lewis (Loch Shell), lies in the heart the great deer forest of Pairc, and some other place-names around the loch which may also be associated with deer-hunts, are listed above. Feadan Dubh an t-Sealgair, Barvas Moor NB388417; Tom an t-Sealgair, Barvas Moor NB3940. Seilg Geo, Dun, St Kilda NF1097; Feadan Dubh an t-Sealgair, Barvas Moor NB388417.

Whales and Dolphins: though *muc* or *muic* literally means 'pig', it is often used as the shortened form of *muc-mhara*, meaning 'whale', literally 'sea pig' probably because the flesh was said to resemble bacon. It is reasonable to assume that all coastal names refer to whales or dolphins rather than to pigs.

Ceann nam Muc, Breasclete NB204355; Cnocan nam Muc, Coll NB455405; Creag Mhór na Mucan Faileag, Shawbost NB240451; Culnamuck, Tangasdale, Barra NF6500; Eilean Mheall nam Muc, Grimsay NF8655; Eilean nam Muca-mara, Carinish, North Uist NF8258; Gob na Muce, Dùn, St Kilda NF1097; Mile Mucul, Shawbost NB267486; Mol na Muc, Tobson, Great Bernera NB1338; Bàgh Ceann na Muice, Scalpay NG2294; Bàgh na Muice, Rossinish, Benbecula NF8654; Bàgh na Muice, Scalpay, Harris NG2096; Both na Muic, Morsgail NB080215 [well inland]; Cnoc Beag Geodha na Muic, Dalbeg NB221458; Cùil na Muice, Vallay, North Uist NF7776; Cul na Muice, Boreray, Sound of Harris NF8481; Eilean Dubh na Muice, Uiskevagh, Benbecula NF8849; Eilean na Muic, Tolsta Head NB558477; Geodh'na Muic, Dalbeg NB223458; Geodh'na Muice, Bragar NB275495; Geodha na Muic, Ballantrushal NB3554; Geodha na Muic, Druim Mór, Gress NB513418; Geodha na Muice, Ronay, North Uist NF8953; Lag na Muice, Berneray, Sound of Harris NF9382; Mol na Muic, Tamanavay, Uig NB0019; Rubha na Muice, Tarbert NG1599; Sgeir na Muice Blianish, Tolstachaolais NB192374; Sgeir na Muice, Rodel, South Harris NG0382; Sgeir na Muice, Vatersay NL6795; Sgeir na'Muic, Tolsta Head NB560473; Sloc na Muice, Mingulay NL5584; Sruth Cùil na Muic, Tangusdale, Barra NF653002

Dolphin or Porpoise: *leumadair* (m) (literally a 'leaper'): Bogh a'Leumadair Mhóir, Mealasta Island NA981224; Leumadair, Camas Uig NB033328; Leumadair, Scarp NA9713; Leumadair Beag, Tobson, Great Bernera NB133392; Leumadair Mór, Mealasta Island NA9822; Leumadair Mór, Tobson, Great Bernera NB132393. Dwelly also gives *péilig* for dolphin, for which no names were found. *Leumadair* may also refer to salmon (Garvie, 1999).

Snakes: *rìghinn* (snake), *nathair* (f) (serpent) probably refers to slow worms, but where 'Righinn' is used, it is probably used in the sense of one of the adjectives listed by Dwelly: tough, adhesive, elastic, sluggish, durable. Rìghinn may also mean a Princess. As before, the offshore island names probably involve one of the other meanings, ie not snakes or slow worms.

Cnoc na Righinn, Shiltenish NB281187; Sgeir Righinn, Flannan Isles NA7245.

Geodha nan Nathraichean, Pairc NB3504; Rubha na Nathraichean, Great Bernera NB1536; Tom na Nathrach, Shawbost NB266470; Cnoc na Nathrach, Tolstachaolais NB194387.

Discussion

Given the lifestyle of the Western Isles until fairly recently, it is hardly surprising that animals of limited significance to survival, such as mice, hardly feature, while deer, a major source of food, are numerous in place-names. The prevalence of otter and pine marten names is likely to be associated with their fur.

Acknowledgements

I am grateful to Mr. John Love for providing background information on deer traps and to Mr. Bill and Mrs Chris Lawson (Harris) for their helpful comments on an earlier draft.

References

Angus, S. (In preparation). *A Place-Name Gazetteer of the Outer Hebrides.*

Dwelly, E. (1977). *The illustrated Gaelic-English Dictionary*. (9th edition). Glasgow: Gairm Publications.

Forbes, A.R. (1905). *Gaelic Names of Beasts (Mammalia), Birds, Fishes, Insects, Reptiles, etc.* Edinburgh: Oliver and Boyd.

Garvie, E. I. (1999). *Gaelic Names of Plants, Fungi and Animals*. Skye: Sabhal Mor Ostaig.

Harvie-Brown, J.A. and Buckley, T.E. (1888). *A Vertebrate Fauna of the Outer Hebrides.* Edinburgh: David Douglas.

Love, J. (1980). Deer traps on the Isle of Rhum. *Deer*, **5**: 131-132.

Macalpine, N. and Mackenzie, J. (1975). *Gaelic-English and English-Gaelic Dictionary*. Glasgow: Gairm Publications.

Mackillop, D. (1989). *Sea-Names of Berneray: Ainmean-mhara Bhearnaraigh*. Inverness: Bookmag.

Macneil, C. (1988). *Only the Sunny Days: Memories of a Barra Childhood.* Glasgow: Heatherbank Press.

Munro, R.W. (Ed.) (1961). *Monro's Western Islands of Scotland*. Edinburgh: Oliver and Boyd.

Thomson, D. (1981). *A Modern Gaelic Dictionary*. Glasgow: Gairm Publications.

Mr. Stewart Angus,
Taransay, Alcaig, CONON BRIDGE, Ross-shire IV7 8HS.

ROBERT DYKES AND THE HUNTERIAN KENYTE SAMPLE

By JULIAN JOCELYN
East Kilbride

In their excellent paper 'On the Rocks in the Southern and Atlantic Oceans - Changing Geological Perspectives' (Durant and Farrow, 1999), the authors draw attention to the kenyte specimen in the Hunterian Museum, University of Glasgow, collected from Mount Erebus, South Victoria Land, by the British Antarctic Expedition 1907-09, the first Shackelton (Nimrod) Expedition.

In Plate 1 (page 277), showing the Hunterian Museum label of the kenyte specimen, the authors note that James Murray was the marine biologist with the Shackelton Nimrod Expedition, and in Figure 4 (page 278) the letter from James Murray to Dykes makes it clear that Murray presented this specimen to Dykes, about whom the authors state "little is known at present". The specimen in the Hunterian Museum was purchased from Dykes in 1918 (Durant and Farrow, 1999: 276).

Although one cannot be completely certain, it seems very likely that this Dykes was Robert Dykes, who contributed the chapter on 'Imitation Gems and the Artificial Production of Precious Stones' in the book *Precious Stones* by W. Goodchild (1908). The preface to the book refers to "Mr. R. Dykes of the Marine Biological Laboratory, Lowestoft, and lately assistant to Sir J[ohn] Murray, K.C.B.".

References

Durant, G.P. and Farrow, G.E. (1999). On the rocks in the Southern and Atlantic Oceans - changing geological perspectives. *Scottish Naturalist*, **111**: 267-309.

Goodchild, W. (1908). *Precious Stones*. London: Constable.

Mr. Julian Jocelyn, 35 Alder Crescent,
Greenhills, EAST KILBRIDE, By Glasgow G75 9NW.

ANTARCTICA RE-DISCOVERED – BORCHGREVINK ROCK SPECIMENS IN THE HUNTERIAN MUSEUM

By JOHN W. FAITHFULL and GRAHAM P. DURANT
Hunterian Museum, University of Glasgow

A number of Antarctic rock samples have recently been re-discovered in the geological collections of the Hunterian Museum. These were not known at the time of a description of the Hunterian's Antarctic rocks (Durant and Farrow, 1999). The re-discovered rocks are from Possession Island and Cape Adare and are clearly labelled 'C.E.Borchgrevink' (Figure 1). These rocks have historical importance as the very first geological specimens collected from the Antarctic continent.

Carsten Egeberg Borchgrevink was born in Oslo in 1864, the son of an English mother and a Norwegian father. At the age of 24 he travelled to Australia, where he found employment initially with government survey teams and then from 1892 as a schoolmaster teaching languages and natural science (Evans and Jones, 1975).

In 1894 an exploratory whaling voyage to the Ross Sea was being organised by Henryk Johan Bull and financed by the famous whaling pioneer Svend Foyn. Under the command of Leonard Kristensen, final arrangements were being made for the *Antarctic* to depart Melbourne for polar waters when Borchgrevink appeared on the scene. The polar explorers, Eivind Astrup and William Speirs Bruce, were originally due to travel with the *Antarctic* but were unable to reach Melbourne in time, thus leaving the expedition without any scientific crew. Borchgrevink arrived in Melbourne on 14th September 1894 and, following an introduction from the Norwegian consul, was able to talk his way on board, but only as a crew member and not as a passenger nor as a scientific observer. Borchgrevink was taken on board as a seaman, seal-shooter and curer of skins, with freedom to use his free time as he pleased (Evans and Jones, 1975). Bull's original plan to accommodate Astrup and Bruce was to build an extra cabin, but Borchgrevink's qualifications and letter of introduction were not such as to warrant the expense of this and Borchgrevink had to make do with seaman's quarters. The *Antarctic*, a 346-ton wooden bark formerly used for hunting seals in the Arctic, sailed from Melbourne on 20th September 1894.

Several accounts of the six-month expedition have been published, by Kristensen (1896), Bull (1896) and Borchgrevink (1895a, 1895b, 1896, 1901), and

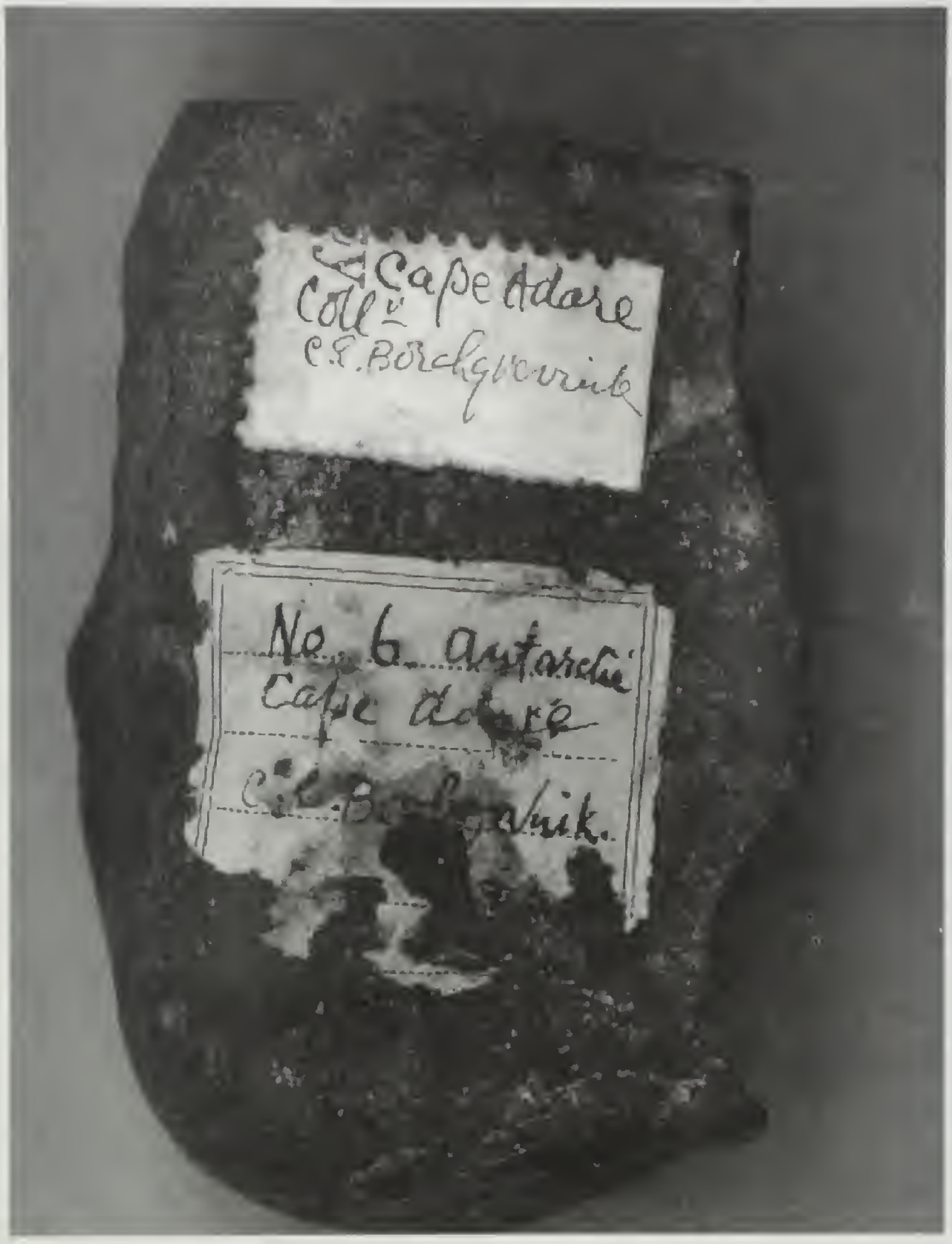

Figure 1

A Borchgrevink specimen from the Antarctic mainland
in the Hunterian Museum collection
(Size 60 x 40 mm approx.)

much has been written about the disputes which erupted between Kristensen, Bull and Borchgrevink after the voyage (eg. Swan, 1961). These disputes seem to have been caused by Borchgrevink's' attempts to take significantly more of the credit for the expedition than he deserved. This was at the expense of the true organiser, Bull, and involved different opinions and recollections about a number of important details. One dispute was about just who had first stepped onto the Antarctic continent when the expedition boat finally beached near Cape Adare. Borchgrevink always claimed that he was the first man to step foot on the Antarctic continent, as demonstrated by his illustration from a popular account (see http://www.south-pole.com/p0000087.htm). Others on the voyage, notably Kristensen and a young seaman, A.H.F. von Tunzleman, dispute this, both claiming to have been the first. In any event, it has been shown subsequently that others landed on the Antarctic continent over seventy years previously during whaling and sealing expeditions (Bewsher, 1992). Although at the time Kristensen and Borchgrevink each believed that one of them was the first person to step onto the Antarctic continent, and were prepared to fight about the details of this event, it seems that the 1895 landing from the *Antarctic* was in fact the fourth landing on the continent and the second in Victoria Land (Bradshaw, 1996).

What is clear, however, is that the rocks collected by Borchgrevink on the 1895 *Antarctic* expedition were indeed the first rocks collected from the Antarctic continent for scientific purposes. It is these rocks which have found their way into the Hunterian Museum collection.

After sailing from Melborne the *Antarctic* spent two months searching for whales off the south-west of Tasmania, around Macquarie Island and Campbell Island, before sighting and approaching the pack ice. By mid-December 1894 the vessel had reached Balleny Island in the Ross Sea, following the track of Sir James Clark Ross with the *Erebus* and *Terror* some 54 years previously (Figure 2). Finding themselves in clear water on 14th January 1895, Bull and Kristensen were able to steer the *Antarctic* towards Cape Adare on Victoria Land. On 18th January the expedition arrived at Possession Island and was able to effect a landing (Figure 3a).

Possession Island is formed of vesicular basaltic lava which forms two peaks some 100 metres high. Borchgrevink used a sledge hammer for his 'geologizing' on the island and climbed one of the peaks. He collected a number of volcanic rock samples and a large sample of guano ("which might prove valuable to Australia") for subsequent analytical testing. His discovery of lichens on rocks about 10 metres above sea-level was the first observation of vegetation in Antarctica.

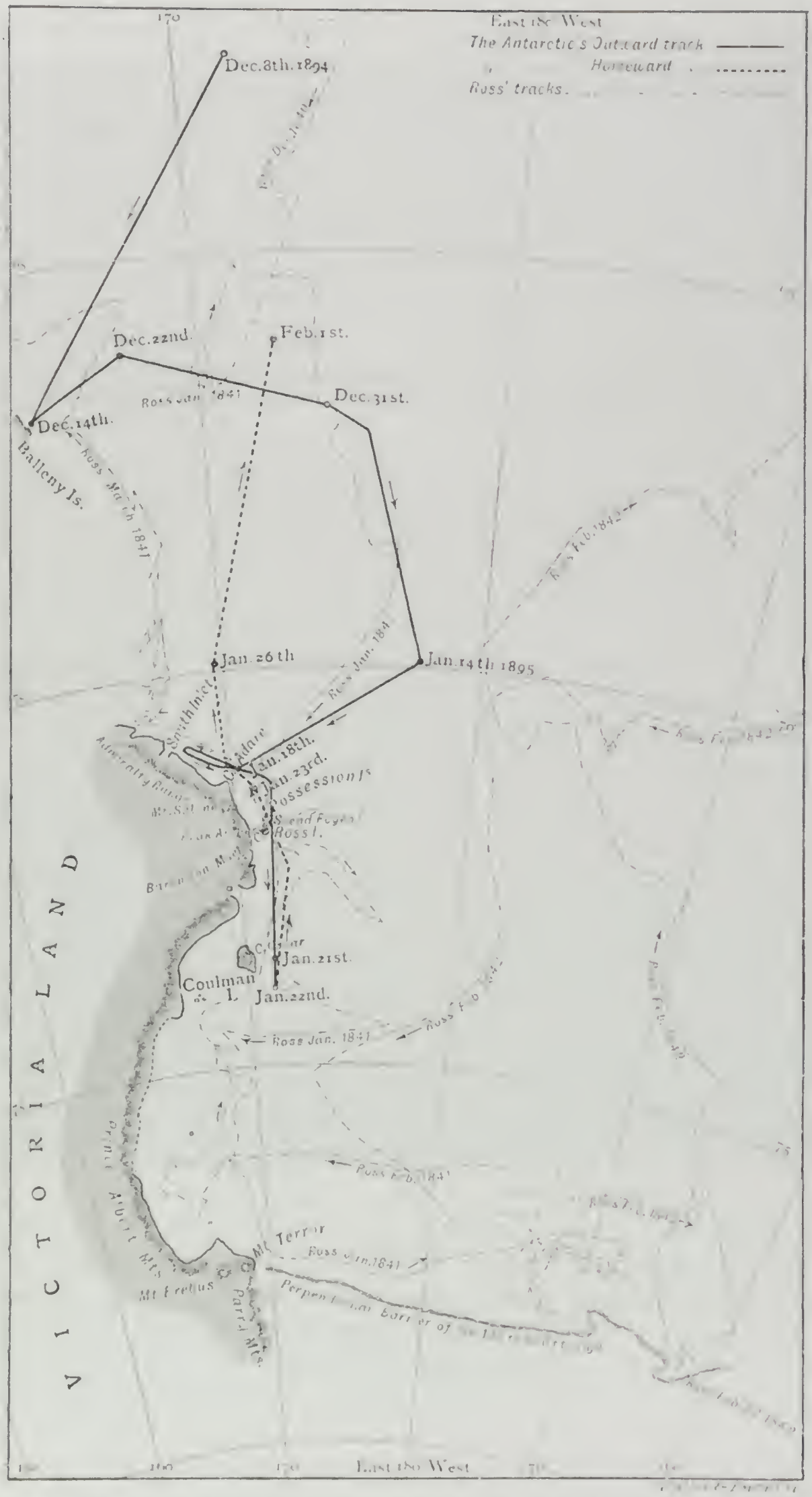

CHART (FROM THE ADMIRALTY CHART) TO SHOW THE TRACK OF THE "ANTARCTIC."

Figure 2

Track chart of the voyage of the *Antarctic* 1894-95 (Borchgrevink, 1895a)

From a Drawing by C. E. Borchgrevink

Figure 3a

The landing on Possession Island
(Borchgrevink, 1897)

(Sketch by Borchgrevink from an article by Borchgrevink in *Century Magazine*)

Figure 3b

The landing at Cape Adare
(Quartermain, 1967)

On 23rd January the *Antarctic* approached the Antarctic mainland at Cape Adare and the disputed landing was made that night (Figure 3b). Borchgrevink collected more rocks and made a further observation of lichens on the rocks. He describes the rocks as "differing but little" from the rocks collected on Possession Island, but noted one granular rock composed of quartz, garnet and feldspar (Borchgrevink, 1895b). A sample of microcline granite from Cape Adare was presented to King Oscar of Norway for use as a paperweight (Evans and Jones, 1975). The significance of these granular and granitic rocks as being of continental origin was subsequently recognised by Edgeworth David (1895). Borchgrevink noted that the discovery of the granular rock holds out hope that minerals of economic value may occur in these regions (Borchgrevink, 1895b).

The expedition returned to Melbourne on 12th March 1895. Kristensen described the voyage in a letter to the Victoria branch of Royal Geographical Society of Australia (Kristensen, 1896). Bull and Borchgrevink presented lectures about the expedition in Melbourne and Sydney. Some of the rocks collected were given to the geologist Professor T.W. Edgeworth David of the University of Sydney who, with colleagues, described thirteen specimens from Possession Island and Cape Adare (David, Smeeth and Schofield, 1895). Examination of these specimens "strongly confirmed the conclusion already arrived at by Dr. John Murray and several eminent biologists as to the existence within the Antarctic Circle of an Antarctic Continent rather than an Antarctic Archipelago. The schistose and granitic rocks collected by Borchgrevink are distinctly of continental origin" (David, Smeeth and Schofield, 1895). It is the rock specimens described by David which are now in the Hunterian.

Other rock samples must have existed, since, for example, the microcline granite presented to King Oscar was not amongst the samples examined by David. Other samples from this expedition were described by the British petrographer, J.J.H.Teall, in an appendix to Bull's book describing *The Cruise of the Antarctic* (Teall: in Bull, 1896). Eleven of the thirteen rocks described by Teall were collected "from the rock" on Possession Island. The other two specimens were "picked up" at Cape Adare by Captain Jensen during the 1895 landing. The specimens described by Teall confirmed a volcanic origin for Possession Island. The two samples from Cape Adare were a volcanic nepheline tephrite and a granitic rock with vein quartz. Since the granitic rock was a pebble, Teall could not confirm that it came from an Antarctic continent. The current whereabouts of these samples is not known. In a Royal Society of Edinburgh paper (Geike, 1898) it is noted that "In November 1895 some further specimens were supplied by Dr. John Murray, which he received from Cape Adair (*sic*), having been collected there by Mr. C.E. Borchgrevink. These were also submitted to Mr. Teall, who examined

and described them. The publication of his notes, however, was still further delayed in the expectation that they would be capable of being extended by the receipt of another collection of specimens. As this hope has not yet been fulfilled, and as so much general interest is now felt in Antarctic exploration, it seems desirable to publish the following details without delay" (Geike, 1898). Teall's paper describes rocks from Dundee Island and Cape Adair, the former being granite, vein quartz, a dark green tuff, and jasper. Two out of three pebbles from Cape Adair are a vesicular olivine basalt. The third pebble is a more compact basalt (Teall, 1898). Dundee Island is in the Weddell Sea and was not visited by the 1895 voyage of the *Antarctic* but was visited by Bruce and others during the 1892-93 Dundee Whaling expedition (Bruce, 1896; Donald, 1896). The Cape Adair rocks collected by Borchgrevink which Teall described were presented to him for examination by Dr. John Murray.

A link can be established between Borchgrevink and Murray which could account for Murray having specimens from the *Antarctic* expedition. Having lectured in Melbourne and Sydney at the end of the 1894-95 expedition, and presumably after having left a collection of rocks with David in Sydney, Borchgrevink hurried to England to attend the Sixth International Geographical Congress at which there was a session devoted to Arctic and Antarctic exploration. The Sixth International Geographical Congress was opened in London on 26th July 1895 by H.R.H. the Duke of York. On Monday 29th July Professor Neumayer and Admiral A.H. Markham introduced the conference session about 'Arctic and Antarctic Exploration'. Unfortunately Borchgrevink was unable to reach London in time and missed the session. However he was given the opportunity to present a paper about the *Antarctic* expedition on Thursday 1st August . His presentation "received an enthusiastic reception and after he had read his paper giving an account of the voyage of the *Antarctic* the Congress offered him its congratulations on the results of his work" (Anon., 1895a). His youthful enthusiasm "made a deep impression on such veterans of Antarctic exploration as Sir Joseph Hooker, Sir John Murray and Dr. G. von Neumayer" (Mill, 1934).

One can imagine the difficulties which Borchgrevink faced as a relatively unknown Antarctic explorer and scientific observer in the exalted company of the Congress. There seems to have been some criticism about the lack of scientific results from the expedition, and when the abstract of his paper was published in *Nature*, Borchgrevink prefaced it with these opening remarks "Allow me first to explain that my scientific observations were made under the disadvantageous circumstances of a sailor before the mast on board the whaler *Antarctic*. There seemed no choice between adopting this course and remaining on shore, and I was consequently able to take very few instruments. This explanation may to some

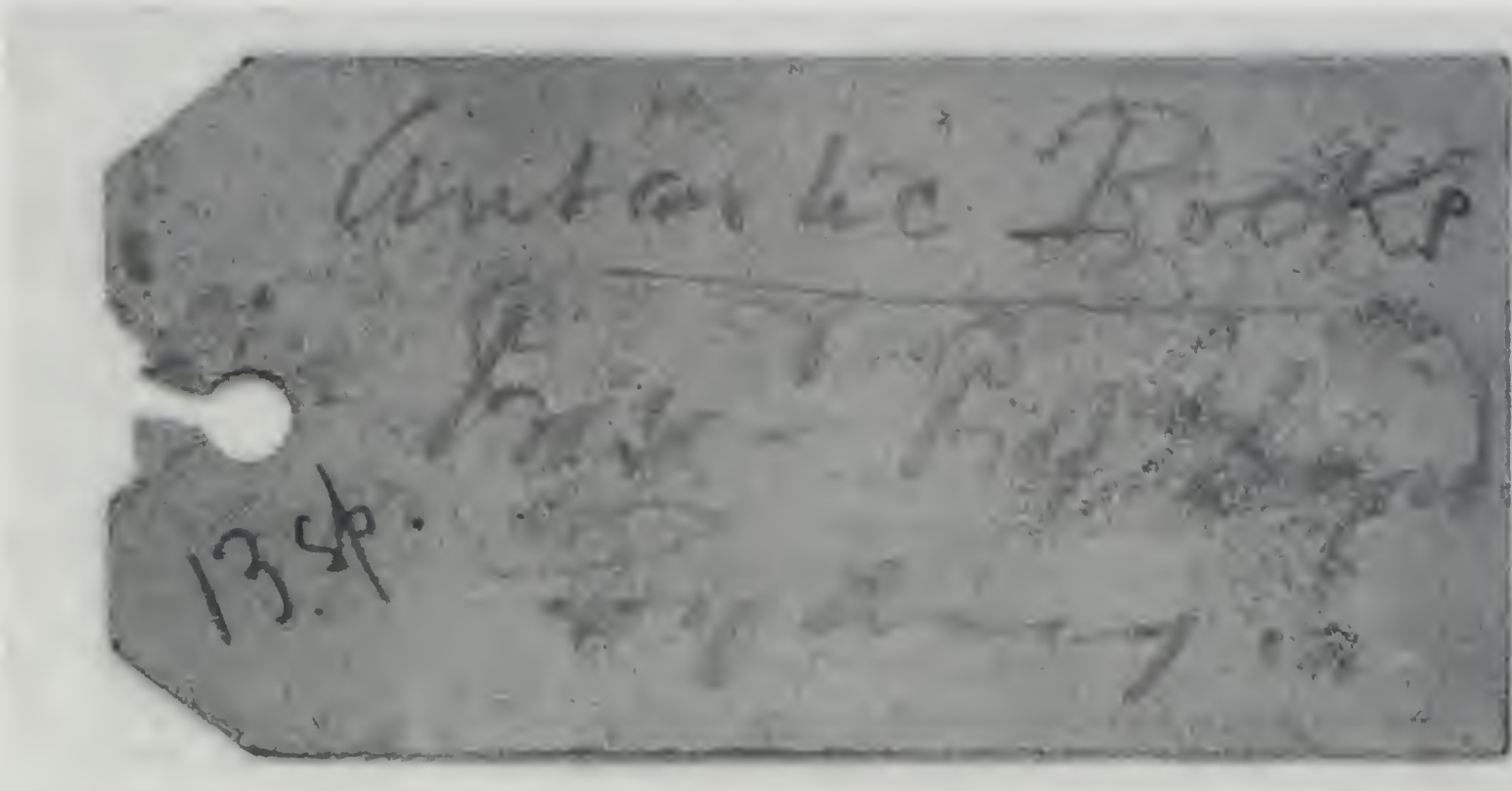

Figure 4

Professor Gregory's hand-written label

Antarctic Rocks
Pres^{d} Prof David
Sydney

13 sp. (specimens)

extent lighten the criticism of my results" (Borchgrevink, 1895b). Borchgrevink probably met Murray at the Congress and again at the British Association meeting in Ipswich where he again presented a paper.

"On Friday, September 13, Mr C.E. Borchgrevink gave a short account of his voyage to Victoria Land and detailed his plans for an expedition to the Antarctic regions which he hopes to conduct from this country. He held, from his observations during the voyage of the *Antarctic* that there were commercial possibilities in the direction of guano, minerals and probably whales, as well as seals in the high southern latitudes. Sir Joseph Hooker spoke of his experiences in Sir James Clark Ross's expeditions and stated that he had been struck by the close resemblance of the photographs brought home by Mr. Borchgrevink, to the sketches made in Ross's ship. Sir William Flower deprecated the attempt to combine scientific observation with commercial pursuits, and strongly urged that any future expedition for research should be purely scientific. Dr. John Murray also spoke in the discussion" (Anon., 1895b). Murray was at the time strongly advocating the renewal of Antarctic exploration (Murray, 1894) and since Borchgrevink wanted to return to Antarctica he must have sought him out.

At some point in the proceedings one presumes that Murray was given the rocks subsequently described by Teall. The mention of the possibility of acquiring further specimens may have been a reference to the samples left behind in Australia with Edgeworth David. But what of these specimens and how did they end up in the Hunterian Museum? A hand-written note on the back of a University of Melbourne expedition label found with the samples provides the answer (Figure 4).

In 1901, John Walter Gregory was Professor of Geology at the University of Melbourne. He was the Royal Society's choice for scientific leader of the British National Antarctic Expedition (1901- 1904) but pulled out, not wanting to serve under Scott. His interest in Antarctica may have been the reason why Edgeworth David presented Borchgrevink's rocks to Gregory for examination. Gregory left Melbourne and took up an appointment as Professor of Geology in the University of Glasgow in 1904, presumably bringing the Borchgrevink rocks with him. The rocks were kept together in a drawer and have escaped notice until now.

Borchgrevink did fulfil his ambition to mount another expedition to Antarctica and did visit Cape Adare a second time but there is little doubt that the rocks in the Hunterian are from the first expedition and not the second 1898 *Southern Cross* expedition. The rocks from the *Southern Cross* expedition, "a more complete series of the rocks he (Borchgrevink) collected at Victoria Land in 1894" (Prior, 1902) are housed in the Natural History Museum in London. The conclusions

from examination of these rocks were subsequently reinforced by an examination of rock samples held from Sir James Clark Ross's 1839-43 expedition to the same area of Antarctica (Prior, 1898).

The Borchgrevink specimens in the Hunterian Museum are listed in Table 1. All the specimens have adhering labels giving locality and collector details. There are two distinct styles. Style 1 consists of pre-printed gummed and lined specimen labels (Figure 1). The writing on these labels is in a dark brownish (faded?) ink with a fairly thick line. Style 2 labels have much finer, smaller and darker writing on pieces of the margins of gummed sheets of penny-denomination postage stamps. This style of writing also overwrites a Style 1 label on specimen 111427: hence these labels are younger. We have not yet identified the handwriting on either style of label. J.W. Gregory is a possibility, as would be T.W.E. David, or possibly even G.W. Tyrrell, who worked extensively on Antarctic rocks at Glasgow.

It is clear that there was a commercial edge to the *Antarctic* expedition and little attempt to maximise the scientific benefit by unifying the geological collections and having them described as a whole. This may reflect poor overall leadership, or be a result of Borchgrevink's lowly position and lack of scientific awareness. It seems that both Captain Jensen and Borchgrevink were distributing specimens from the expedition for study, and that not all of them were properly described together. However, some of the samples did provide the first definitive proof of continental rocks on mainland Antarctica and as such they have great historical significance.

Acknowledgements

The authors would like to thank Hunterian colleagues for their help with this work.

References

Anon. (1895a). The Sixth International Geographical Congress. *Geographical Journal*, **5**: 269-274.

Anon. (1895b). Geography at the B.A., Ipswich. *Geographical Journal*, **5**: 460-465.

Bewsher, W. (1992). The first Antarctic landing. *Aurora*, **11**: 17.

Borchgrevink, C.E. (1895a). The 'Antarctic's voyage to the Antarctic. *Geographical Journal*, **5**: 583-589.

Number	Rock type	Adhering label(s)	Notes
111424	Basalt?	"No. 1 Possession Island Antarctica CE Borchgrevink" (Style 1)	34x24mm. Fine-grained and aphyric. Cf No 1 in David *et al* (1895)?
111425	Basalt?	"No. 2B Possession Isd. Borchgrevink" (Style 2)	53x40mm. With sparse plagioclase microphenocrysts. Not the same as No 2 in David *et al* (1895) which is a trachyte.
111426	Basalt?	Damaged and partly illegible "No... Possession... tica" (Style 1)	51x35mm. Fine-grained and aphyric.
111427	Basalt?	Two labels giving same information:eg "No 11 Possession Island Coll. CE Borchgrevink" (style 1, includes overwriting in style 2 writing, plus separate style 2)	110x80mm. Vesicular, lined with thin films of pale brownish ?zeolite?. Seems to correspond to No 11 in David *et al* 1895.
111428	Basic tuff?	"Possession Isd Coll. Borchgrevink" (Style 2)	30x27mm. Guano-encrusted chip.
111429	Basic tuff?	"Possession Isd Coll. Borchgrevink" (Style 2)	34x25mm. Weathered guano-encrusted chip.
111430	Basalt?	"Possession Isd Coll. Borchgrevink" (Style 2)	78x67mm. Fine-grained and aphyric. Very like 111431. Sawn.
111431	Basalt?	"Possession Isd Coll. Borchgrevink" (Style 2)	72x68mm. Fine-grained and aphyric. Very like 111430. Sawn.
111432	Basalt	"Possession Isd? Coll. Borchgrevink" (Style 2)	62x47mm. Sparse clinopyroxene phenocrysts. Sawn.
111433	Basalt?	"Possession Isd? Coll. Borchgrevink" (Style 2)	37x34mm. Fine-grained and aphyric. Sawn.
111434	Basalt	"No 3 Cape Adare Borchgrevink" (Style 2)	37x34mm Phenocrysts of fresh olivine, cpx and plagioclase. Cf No. 3 in David *et al* (1895)
111435	Basaltic andesite?	"No. 6 Antarctica Cape Adare Col. Borchgrevink" (Style 1 and Style 2)	60x40mm. Fine-grained and aphyric. Cf No 6 in David *et al* (1895). Sawn.
111436	Mica schist	"Cape Adare Victoria Land Colld. CE Borchgrevink" (Style 2)	50x44mm. Fine-grained. Looks identical to figured sectioned rock No. 5 in David *et al* (1895). Sawn.
111437	Trachyte?	"Cape Adare Victoria Land Colld. CE Borchgrevink" (Style 2)	56x49mm. Cf Nos 1 and 2 in David *et al* (1895). Sawn.

Table 1: List of C.E. Borchgrevink specimens in the Hunterian Museum

Borchgrevink, C.E. (1895b). The voyage of the 'Antarctic' to Victoria Land. *Nature,* **52**: 375-377.

Borchgrevink, C.E. (1896). The first landing on the Antarctic continent, being an account of the recent voyage of the whaler 'Antarctic'. *Century Illustrated Monthly Magazine* (NS), **29**: 432-448.

Borchgrevink, C.E. (1897). Antarctic exploration. *Strand Magazine*, **13**: 344-352.

Borchgrevink, C.E. (1901). *First on the Antarctic Continent, being an Account of the British Antarctic Expedition* 1898-1900. London: George Newnes.

Bradshaw, M. (1996). That 'First Antarctic Landing'. *Polar Whispers,* 7. Newsletter of the New Zealand Antarctic Survey. (http://www.anta.canterbury.ac.nz/...ws/nzas/newsletter/june_1996.html).

Bruce, W.S. (1896). Cruise of the 'Balaena' and the 'Active' in the Antarctic seas, 1892-93. I. The 'Balaena'. *Geographical Journal*, **7**: 502-519.

Bull, H.J. (1896). *The Cruise of the 'Antarctic' to the South Polar Regions*. London: Edward Arnold.

David, T.W.E., Smeeth, W.F. and Schofield, J.A. (1895). Notes on Antarctic rocks collected by Mr. C.E. Borchgrevink. *Proceedings of the Royal Society of New South Wales,* **29**: 461-492.

Donald, C.W. (1896). Cruise of the 'Balaena' and the 'Active' in the Antarctic seas, 1892-93. II. The 'Active'. *Geographical Journal*, **7**: 625-643.

Durant, G.P. and Farrow, G.E. (1999). On the rocks in Southern and Atlantic Oceans – changing geological perspectives. *Scottish Naturalist*, **111**, 267-309.

Evans, H.B. and Jones, A.G.E. (1975). A forgotten explorer: Carsten Egeberg Borchgrevink. *Polar Record*, **17**: 221-235.

Geike, A. (1898). Notes on some specimens of rocks from the Antarctic regions. *Proceedings of the Royal Society of Edinburgh,* **22**: 66-68.

Kristensen, L. (1896). Journal of the Right-whaling cruise of the Norwegian steamship 'Antarctic' in South Polar seas 1894-5. *Transactions of the Royal Geographical Society of Australia (Victoria Branch)*, **12-13**: 73-100.

Mill, H.R. (1934). Mr. Carsten E. Borchgrevink. *Geographical Journal*, **83**: 534-535.

Murray, J. (1894). The renewal of Antarctic exploration. *Geographical Journal*, **3**: 1-42.

Prior, G.T. (1898). *Petrographical Notes on the Rock-Specimens Collected in Antarctic Regions during the Voyage of HMS Erebus and Terror under Sir James Clark Ross in 1839-43*. London: British Museum (Natural History).

Prior, G.T. (1902). *Report on the Collections of Natural History made in the Antarctic Regions during the Voyage of the 'Southern Cross'*. London: British Museum (Natural History).

Quartermain, L.B. (1967). *South to the Pole: the Early History of the Ross Sea Sector, Antarctica*. London: Oxford University Press.

Swan, R.A. (1961). *Australia in the Antarctic: Interest, Activity and Endeavour.* Melbourne: University Press.

Teall, J.J.H. (1896). Notes on specimens from Possession Island and Cape Adare, collected by Captain Jensen. In: *The Cruise of the 'Antarctic' to the South Polar Regions* (J.H. Bull), Appendix II, pages 240-243. London: Edward Arnold.

Teall, J.J.H. (1898). Petrological notes on specimens from Dundee Island and Cape Adair. *Proceedings of the Royal Society of Edinburgh,* **22**: 68-70.

Dr. John W. Faithfull, Hunterian Museum, University of Glasgow, GLASGOW G12 8QQ.

Dr. Graham P. Durant, Hunterian Museum, University of Glasgow, GLASGOW G12 8QQ.

NOTES ON THE DRAGONFLIES OF RENFREWSHIRE

By J.A. GIBSON and H.A. HILLAN
Renfrewshire Natural History Society

Introduction

Because of their colourful and often striking appearance, the dragonflies (order Odonata) are probably one of the most distinctive groups of creatures which inhabit the British countryside. Most naturalists recognise dragonflies readily enough but, unless specialists, may seldom know the precise identity of the various species.

We have been interested in dragonflies for a great many years, and have always kept notes of any species which we have seen throughout the county. No detailed account of the dragonflies has previously appeared in the Renfrewshire Natural History Society's *Transactions,* so we hope that these collected notes, largely based on our personal observations, will be of interest to other naturalists and will fill a gap in our knowledge of Renfrewshire natural history.

Identification Method

The common species are easily recognised, but the more unusual species may require some care. If there is any doubt, dragonflies are easily caught in a standard butterfly net, from where it is a simple matter to transfer any specimen to a clear plastic container with a lid, which makes close and detailed examination easily possible, and identification, when immediately compared to a suitable key, usually reliable. It also avoids any real harm to the dragonfly. This is a useful aid, without which we believe some records of the less common species could easily have been missed.

Identification Keys

The identification book we originally used was Cynthia Longfield's pioneer work on *The Dragonflies of the British Isles* (1937, 1949). Within recent years, however, we have used C.O. Hammond's *The Dragonflies of Great Britain and Ireland* (1977, 1983) described by Cynthia Longfield herself as "the dragonfly book of the century". This has the advantage of simply magnificent colour plates

and updated identification keys, which so far have enabled us to identify all the dragonflies we have found in Renfrewshire.

Information on Distribution

As previously indicated, the following notes on the distribution of dragonflies throughout Renfrewshire are almost entirely personal, but, where relevant, we have also referred to any additional information contained in the national 10-km square publication, the *Atlas of the Dragonflies of Britain and Ireland* (Merritt, Moore and Eversham, 1996), although without any precise knowledge as to the origin of the records. These instances are made clear in the text.

Needless to say, if any other naturalists know of any additional published or unpublished records, we shall be most grateful to have these drawn to our attention.

English Names

The English names for many species of dragonflies are largely contrived and have recently undergone considerable revision. Cynthia Longfield's original English names were modified by Hammond, and these modified names are used here. The British Dragonfly Society, however, has emphasized that only the Latin scientific names, known internationally, should be used for serious study.

In general, the English name dragonfly is used to mean all members of the order Odonata. 'Damselflies' are members of the suborder Zygoptera, which as adults are usually smaller, slender-bodied species, which hold their wings closed, or nearly closed, over the abdomen when at rest. The suborder Anisoptera, the 'true dragonflies', contains the larger, more robust and actively hawking species.

Systematic List

In the following Systematic List the arrangement and nomenclature follow Merritt, Moore and Eversham (1996). Where possible, for the commoner species we have added the flight periods known to us, i.e. the average dates when we have found adults to be on the wing in Renfrewshire. It should be emphasized, however, that these dates can be significantly altered by different weather patterns.

Suborder ZYGOPTERA

Family LESTIDAE

EMERALD DAMSELFLY *Lestes sponsa*

Not very common, and somewhat local, although some traditional sites known. This is a slender light metallic-green damselfly which usually perches with its wings half open, a position "intermediate between most damselflies and true dragonflies" (Merritt, Moore and Eversham, 1996).

Family COENAGRIONIDAE

LARGE RED DAMSELFLY *Pyrrhosoma nymphula*

The commonest species in Renfrewshire, and reasonably well distributed throughout the county - ponds, bogs, moorland and also gardens; a fairly long flight period, from end of April until early September.

AZURE DAMSELFLY *Coenagrion puella*

Not uncommon and fairly well distributed, but in our experience this damselfly can be very erratic in numbers; some years very few recorded. Flight period mid-May to mid-August.

COMMON BLUE DAMSELFLY *Enallagma cyathigerum*

Fairly common and well distributed, sometimes in localised swarms around the edges of marshes and lochs; also occurs on some higher heather moors. Flight period early May to late September.

BLUE-TAILED DAMSELFLY *Ischnura elegans*

Reasonably well-known and fairly well distributed in lower areas: a good many records from places near the sea-shore, in squares NS27 and NS37. These squares are not included in the national Atlas, which only gives NS35, NS36 and NS46, squares where this species is also fairly well known. Flight period mid-May to mid-September.

Suborder ANISOPTERA

Family AESHNIDAE

COMMON HAWKER *Aeshna juncea*

Well known and fairly widely distributed throughout the county - pools, bogs, heather moors and also edges of woodland; fairly late flight period, mainly July to

end of September and occasionally later. In our experience, this dragonfly, although present, may only be really very active in fairly bright sunshine, and so may actually be more common than at first appears.

Family CORDULEGASTRIDAE

GOLDEN-RINGED DRAGONFLY *Cordulegaster boltonii*

Fairly well-known and reasonably widely distributed in a wide variety of the usual habitats, and also along the edges of some swiftly-flowing streams and rivers. Flight period mainly June to August. This species appears to be under-recorded in the national Atlas, being only recorded from square NS27, although it is also recorded from neighbouring squares just outwith the Renfrewshire county boundary.

Family LIBELLULIDAE

FOUR-SPOTTED CHASER *Libellula quadrimaculata*

Recorded from squares NS36, NS37 and NS46 in the national Atlas; we can add squares NS26 and NS27. In our experience, however, this dragonfly can be very erratic; some years plentiful, but in other years hardly seen.

COMMON DARTER *Sympetrum striolatum*

Seen in small numbers most years, but never really common. All our personal records come from higher moorland ground, in squares NS26 and NS36. The national Atlas gives 1975-90 for square NS35, from where we ourselves have no record.

We class all specimens as the Common Darter *Sympetrum striolatum*, although Hammond (1983) said Scottish records referred mainly to the closely-allied species the Highland Darter *S. nigrescens*. Merritt, Moore and Eversham (1996), however, said that the specific distinction between *S. striolatum* and *S. nigrescens* was still unresolved; on the slender evidence available to us we have not been able to make any comment on this distinction.

BLACK DARTER *Sympetrum danae*

This is a smaller, and sometimes rather inconspicuous, species, which can easily be overlooked and so may appear to be less common than is really the case. In Renfrewshire we have only found it on moorland in late summer, in square NS36,

which is also the only 10km-square from where it is recorded in the national Atlas. Additional information would be very welcome.

Summary

At least twenty-three species of Odonata have been recorded for Scotland, but many of these are northern species, virtually confined to the highlands and islands. According to our information, ten species have been recorded for Renfrewshire, and in our experience the commonest is the Large Red Damselfly, which is apparently the usual position throughout most parts of the West of Scotland. The Common Blue Damselfly, Blue-tailed Damselfly, Common Hawker, and Golden-ringed Dragonfly also fairly well-known, but the others are much less common, and one can sometimes be fairly fortunate to see them.

It is hoped that the publication of this short species list may encourage others to add to the known information about the distribution of dragonflies in Renfrewshire.

References

Hammond, C.O. (1977). *The Dragonflies of Great Britain and Ireland.* London: Curwen.

Hammond, C.O. (1983). *The Dragonflies of Great Britain and Ireland.* (Second edition, revised by R. Merritt). Colchester: Harley Books.

Longfield, C. (1937). *The Dragonflies of the British Isles.* (Second edition, 1949). London: Warne.

Merritt, R., Moore, N.W. and Eversham, B.C. (1996). *Atlas of the Dragonflies of Britain and Ireland.* I.T.E. Research Publication No. 9. London: H.M.S.O.

Dr. J.A. Gibson,
Foremount House, KILBARCHAN, Renfrewshire PA10 2EZ.

Mr. Hugh A. Hillan,
9 Belleisle Crescent, BRIDGE OF WEIR, Renfrewshire PA11 3JA.

SHORT NOTES

THE NEW STATISTICAL ACCOUNT OF SCOTLAND, 1843-45: CORRECT PUBLICATION DATES OF THE PARISH ACCOUNTS. ERRATA

In the above paper (*Scottish Naturalist*, 107: 3-52; 1995) the undernoted corrections require to be made:

(1) Under Argyleshire on page 26 there is an unfortunate misprint, **Gicha** instead of **Gigha**. This error is obvious.

There are, however, several much more important errors which require to be corrected, as follows:

(2) Page 18. Part 51 (August 1845) should also have included Indexes, plus Argyleshire, addendum (for parish of Lochgoil-head), but these two entries were unaccountably electronically omitted. The correct reference, in similar format to the other entries, should be as undernoted:

51. **No. LI. August 1845.**

Fifeshire, conclusion
Indexes
Argyleshire, addendum

(3) Page 26. Under Argyleshire, the publication date (fourth column; month and year) for the Addendum to the parish of Lochgoil-head and Kilmorich has been incorrectly repeated as January 1845 (the date of original writing) instead of August 1845; the original quarterly part (third column) should be Part 51, not Part 50 as stated. The correct reference, in similar format to the other entries, should be as undernoted:

Lochgoil-head and Kilmorich, Addendum	January 1845	**51**	August	**1845**

(4) Page 41. Much more seriously, however, the entry for the parish of Govan has been completely omitted from Lanarkshire. The relevant section on Lanarkshire, containing Govan parish, appeared in Part 26 (May 1840), correctly referenced on page 15 of the paper, but in the detailed parish listings, Govan, which should have been listed under Lanarkshire on page 41, has been entirely omitted.

The correct reference, in similar format to the other entries on page 41, inserted between Glasgow and Hamilton, should be as undernoted:

Govan	February 1840	**26**	May	**1840**

Investigations into these errors have produced the following results:

- All items were correct in the original manuscript.

- Error (1) was a straightforward misprint in the transfer to the computer disc, which was not noticed before print-out.

- Errors (2) and (3) occurred during the transfer to the computer disc. These were noted and corrected at the time, but for some unknown reason these corrections, checked on the computer screen, were not carried forward into the final text. This has not been explained.

- The entry for Govan parish, Error (4), was correct and present in both the original manuscript and on the computer disc, but had completely disappeared from the final text print-out. No explanation has been forthcoming for this.

Apparently these errors simply seem to have been some of those 'computer errors' about which one hears so much nowadays, with no explanations available. It is, however, a salutory lesson not to place too much faith in electronics, and to check all text and any corrections, not just on the computer screen, but on a further text print-out. A thorough search and comparison has now been carried out between the original manuscript and the final printed text, and as far as can be ascertained, no further errors have been found. One can only hope that this is the case, and sincere apologies are expressed to all concerned.

J.A. Gibson

SPEED OF THE SPARROWHAWK IN DIRECT FLIGHT

A pair of Sparrowhawks *Accipiter nisus* nests fairly regularly in the grounds of our Ayrshire home (Lodgebush House, near the village of Craigie, Ayrshire: NS 425321), and there is also a substantial rookery a few hundred yards from the main house. The country road leading from the main road to the village of Craigie contains many bends, but also contains a long straight section of road, some half-a-mile long, with a continuous hedge on each side.

Around 11.30 a.m. on 22nd April 2001, when driving along the country road, we came behind a female Sparrowhawk being constantly harassed and chased by serried ranks of Rooks *Corvus frugilegus*, which were flying over the hedge from the fields on each side of the road and cawing very noisily. Because of the large number of Rooks on each side, it appeared that the Sparrowhawk's only means of escape was to continue to fly directly along the road. A good many Jackdaws *Corvus monedula* were present in the fields and also joined in the harassment.

When the Sparrowhawk reached the long straight section of road, it put on a considerable burst of speed, clearly outdistancing the corvids - although more birds kept coming over the hedge further along the road ahead of the hawk, and we were now able to follow closely behind the Sparrowhawk along the half-mile straight section. Fortunately there was no other vehicle on the road, so we were able to keep a steady speed directly behind the hawk, which flew at a virtually uniform 48 miles per hour along the half-mile stretch.

The Sparrowhawk consistently followed the left-hand grass verge of the road, very close to the hedge, and kept extremely close to the ground, usually little more than one foot above the grass, and 'hedge-hopped' briskly over any obstruction in its path, including a 'wheelie-bin' (four feet high) at the end of a farm drive. Instead of its usual style of flight when hunting, the Sparrowhawk travelled almost the entire half-mile length of road on rapid wing beats; it only resorted to gliding when clearing obstructions, and then for only a very few seconds at a time.

At the end of the half-mile stretch of road the Sparrowhawk, by now being clear of the corvids, flew to the right over the hedge, but we were able to keep it in sight, and shortly afterwards found it, looking rather bedraggled and exhausted, at the foot of a hedge alongside the main road. It seemed to pay little attention to the car parked close beside it, and shortly afterwards flew away, apparently none the worse. The day was overcast, cool, dry, and with no wind.

A search through the standard reference works has produced little information about the speed of the Sparrowhawk in prolonged straight flight, so we feel that this small, but possibly unusual, observation should be placed on permanent record.

M.M. Baxter and J.A. Gibson

BOOK REVIEW

MITCHELL, JOHN (2001). *Loch Lomondside*. New Naturalist Library, No. 88. London: Harper Collins. Pages 1-232. Illustrated with colour plates, black and white photographs and line drawings.

Hardback. ISBN 000 220145 3. £34.99.

Paperback. ISBN 000 220146 1. £19.99.

This book on *Loch Lomondside*, Volume 88 in the long-established New Naturalist series, has been in the pipe-line for some considerable time and has been awaited with eager anticipation by all interested naturalists. It can be said at once that it is a volume for which it has been well worth waiting.

The author Mr. John Mitchell, of the Nature Conservancy Council and then Scottish Natural Heritage, has been the accepted authority and major figure on the Loch Lomond scene for some 35 years, and from 1966 to 1994 was Senior Warden of the Loch Lomond National Nature Reserve. He is a remarkable polymath, with an incredibly widely-based and profound natural history expertise, and his personal contribution to our knowledge of the history and natural history of Loch Lomond is completely unrivalled, which has earned him well-merited honours from learned institutions and the deepest respect and admiration from all his contemporaries.

Mr. Mitchell was the founder and editor of the *Loch Lomond Bird Report* (1972-94), so highly regarded for its scrupulous accuracy and precise reference to all previous work; co-author of the *Atlas of Loch Lomond Vertebrates* (1986); author of a most extensive series of authoritative publications about Loch Lomond in many prestigious local and national scientific journals for over 30 years; the author of several local relevant booklets; and, since his retirement, the author of a continuing series of superbly researched papers on many hitherto uninvestigated aspects of Loch Lomond's history.

Many of Mr. Mitchell's pioneer publications will probably be quite unknown to the general public, but now, in *Loch Lomondside*, we have a condensation of his unique experience and wisdom in a form available to all.

The substance of the book consists of four well-constructed major sections, - The Physical Environment; The Influence of Man on the Environment; Wildlife Habitats, Communities and Species; and Conservation: Past, Present and Future. Each major section has several chapters expanding the information, and the entire framework is set out with the most admirable logic and lucidity, which anyone can follow with ease. Mr. Mitchell gives an all-embracing summary of the history, geology and landscape, vertebrate zoology, vegetation, and environmental

problems of Loch Lomond, but it is very much more than a summary; throughout all his writing he places everything in its correct context and indicates just how changes can never be assessed in isolation without considering the impact on other loch matters.

Possibly Mr. Mitchell's most valuable legacy to future generations comes in his final section, on Conservation: Past, Present and Future. Here his thoughtful and sound overview covers generations of human activities around Loch Lomond, but indeed, throughout the entire book the author's underlying theme, although not always stated in so many words, is to indicate the damage caused by Man's impact, how this can be redressed and avoided in the future, and how the varied demands and pressures made on Loch Lomond by factions with differing values, e.g. recreation as opposed to conservation, can best be resolved, - a pressing need. These are wise thoughts indeed, based on an incomparable experience, and no-one who reads this book and takes Mr. Mitchell's warnings to heart should ever again make the same mistakes of the past.

At the end, there is a very useful bibliography, and although this may be more truncated than some researchers might wish, there is a reason for this, and with very few exceptions it covers most significant past publications likely to be required. All aspects of the book are very well illustrated with relevant photographs, many of which the author himself has taken or rediscovered, and the entire volume is produced to the usual high standard of the New Naturalist series. The hardback and softback versions have different front-cover illustrations, and readers will make up their own minds as to which cover they prefer.

In summary, this is one of the very best natural history books which any member of the general public is ever likely to possess. Virtually every page contains Mr. Mitchell's distilled knowledge, insight and wisdom, but despite this, the book is exceptionally easy to read, for the author has a deceptively easy style of writing, by no means universal in experts, so that one is absorbing important information all the time, often without realising it.

Quite coincidentally, *Loch Lomondside* has also been published at a most opportune time, - when the establishment of the long-overdue, but hopefully soon to be forthcoming, Loch Lomond and Trossachs National Park is now underway. This wonderful book should be required reading for all local and central Government officials involved with the creation of the Park; it is to be fervently hoped that all concerned already possess copies.

J.A. Gibson

THE SCOTTISH NATURALIST

Volume 113

2001

List of Contents, 2001

113th Year 2001

Parts One/Two

Vertebrate Zoology in the Scottish Naturalist
Part 3: 1901-1925
3b: *Scottish Naturalist* 1912-1925
By Dr. J.A. Gibson 3-100

Part Three

Editorial
Glasgow Natural History Society
- 150 years 103-105

Notes on the Bumble-Bees of Renfrewshire
By Dr. J.A. Gibson and Mr. H.A. Hillan 107-112

Mammals and Reptiles in Place-Names
in the Western Isles
By Mr. Stewart Angus 113-124

Robert Dykes and the Hunterian Kenyte Sample
By Mr. Julian Jocelyn 125

Antarctica Re-discovered - Borchgrevink Rock Specimens
in the Hunterian Museum
By Dr. John W. Faithfull and Dr. Graham P. Durant 127-139

Notes on the Dragonflies of Renfrewshire
By Dr. J.A. Gibson and Mr. H.A. Hillan 141-145

Short Notes

The New Statistical Account of Scotland, 1843-45:
Correct Publication Dates of the Parish Accounts. Errata
Dr. J.A. Gibson 147-148

Speed of the Sparrowhawk in Direct Flight
Dr. M.M. Baxter and Dr. J.A. Gibson 148-149

Book Review

Loch Lomondside. By John Mitchell
Dr. J.A. Gibson 151-152

THE SCOTTISH NATURALIST

Founded 1871

A Journal of Scottish Natural History

With which is incorporated *The Annals of Scottish Natural History* and *The Western Naturalist*

Record of Publication

The Scottish Naturalist and Journal of the Perthshire Society of Natural Science
1871

The Scottish Naturalist
1872-1891

The Annals of Scottish Natural History
1892-1911

The Scottish Naturalist
1912-1939, 1948-1957, 1961-1964

The Western Naturalist
1972-1982

The Scottish Naturalist
1983-date

Published by The Scottish Natural History Library

THE SCOTTISH NATURALIST

Founded 1871

A Journal of Scottish Natural History

With which is incorporated *The Annals of Scottish Natural History* and *The Western Naturalist*

113th Year 2001

CONTENTS

2001 - Part 3

Editorial

Glasgow Natural History Society - 150 years 103-105

Notes on the Bumble-Bees of Renfrewshire
By Dr. J.A. Gibson and Mr. H.A. Hillan 107-112

Mammals and Reptiles in Place-Names in the Western Isles
By Mr. Stewart Angus 113-124

Robert Dykes and the Hunterian Kenyte Sample
By Mr. Julian Jocelyn 125

Antarctica Re-discovered - Borchgrevink Rock Specimens in the Hunterian Museum
By Dr. John W. Faithfull and Dr. Graham P. Durant 127-139

Notes on the Dragonflies of Renfrewshire
By Dr. J.A. Gibson and Mr. H.A. Hillan 141-145

Short Notes 147-149

Book Review 151-152

Title-Page and List of Contents 153-155

Published by The Scottish Natural History Library